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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,112

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Andrew Aydon Godfrey

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EXAMINER

TRUONG, TAMTHOM NGO

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

04/13/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,112	<b>Applicant(s)</b> GODFREY, ANDREW AYDON	
	<b>Examiner</b> TAMTHOM N. TRUONG	<b>Art Unit</b> 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11-3-08.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/24/08, 1/10/06, 12/23,05, 5/2606.

### **NON-FINAL ACTION**

Applicant's election of Group I (claims 1-7, 12 and 13) in the reply filed on 11-3-08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 8-11 are withdrawn from consideration as being drawn to the non-elected subject matter.

Claims 1-7, 12 and 13 remain for consideration.

#### ***Claim Rejections - 35 USC § 112, Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-7, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

a. Claim 1 recites formula (I) which has X as a leaving group, but its preparation has Y as a leaving group. It is unclear if X and Y represent the same moieties. Furthermore, formula (I) has PG (protecting group) on the ring nitrogen, but it is unclear how PG bonded to the ring nitrogen since the final product seems to be formula (III) in which the ring nitrogen has hydrogen.

Claims dependent on claim 1 are also rejected for the same reason.

- b. Claim 12 recites a process of making formula (IX) from starting materials of formulae (II) and (III). However, if Y is a leaving group, it is unclear how the side chain at the 6-position is added to formula (III) to obtain formula (IX).
- c. Claim 13 recites a process of making formula (X) from starting materials of formulae (II) and (III). However, if Y is a leaving group, it is unclear how the side chain at the 6-position is added to formula (III) to obtain formula (X).

***Claim Rejections - 35 USC § 112, First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2. **Essential Step Is Missing:** Claims 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The step of adding the side chain at the 6-position is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The processes in claims 12 and 13 depend on claim 1 for starting materials of formulae (II) and (III). However, starting materials have Y as a leaving group which would be cleaved off. Thus, without the step of adding on the side chain at the 6-position, the claims would not be completed. Furthermore, R<sup>3</sup> represents many moieties and functional groups, but

the process described in the specification only has R<sup>3</sup> as -CH-C≡CH. Thus, as written claims 12 and 13 are not fully supported by the specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

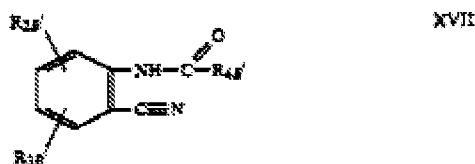
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Clemence et. al.** (US 5,324,839).

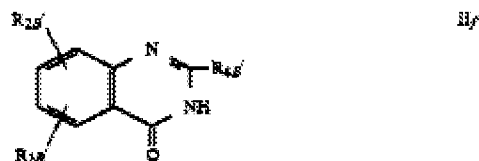
In column 16, the step of cyclizing formula XVII into formula II<sub>f</sub> which corresponds to the process in claim 1, see the following excerpt:

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in which  $R_{4g}$  has the meaning above to obtain a product of the formula



in which  $R_{3B}$ ,  $R_{3B'}$  and  $R_{4B}$  have the meanings previously indicated to obtain after cyclization a product of the formula



in which  $R_{3B}$ ,  $R_{3B'}$  and  $R_{4B}$  have the meanings above, which products of formula I<sub>g</sub> can be the products of formula I<sub>g</sub> and the products of formulae II<sub>a</sub>, II<sub>b</sub>, II<sub>c</sub>, II<sub>d</sub>, and II<sub>f</sub> as defined above which can be the products of formula I<sub>g</sub> in which at least one of  $A_{1B}$ ,  $A_{2B}$ ,  $A_{3B}$  and  $A_{4B}$  is methine carrying a hydroxyl, which are subjected, if desired and if necessary, to one or more of the following reactions in any order:

Note, the definition of  $R_{3B'}$  is the same as that of  $R_{3B}$  which corresponds to the instant variables X or Y, and can be a substituted alkyl group.

The disclosed process differs from the claimed process by not having a PG (protecting group) on the ring nitrogen of formula II<sub>f</sub>. However, the instant claim 1 does not recite the step of adding PG onto the ring, and formula (III) is the apparent final product.

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Thus, as written, it would have been obvious to derive the instant process from the process of **Clemence et. al.** (US'839) because the step of cyclizing formula II to obtain formula III is generically taught by said reference.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMTHOM N. TRUONG whose telephone number is (571)272-0676. The examiner can normally be reached on M, T and Th (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tamthom N. Truong/  
Examiner, Art Unit 1624

/James O. Wilson/  
Supervisory Patent Examiner, Art Unit 1624

*Tamthom N. Truong*  
*Patent Examiner, Art Unit 1624*

4-2-09